The Politics of Electricity Reform: Evidence from West Bengal, India

Elizabeth Chatterjee
Department of Political Science
University of Chicago

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Abstract

Across many developing countries, the power sector persistently underperforms despite years of market reform efforts. India, where de facto responsibility for the power sector rests with subnational (state) governments, provides a useful laboratory to examine why. The state of West Bengal provides an example of public sector reform as an alternative to the so-called "World Bank template" for electricity liberalization, and a lens on the political preconditions for reform success. Drawing on 30 elite interviews in 2016 alongside comparative evidence from other Indian states, this article documents the reform design and assesses its success. West Bengal's reforms aimed at internally strengthening the utility against political interference. The study finds that this reform model delivered initial performance among the best of any Indian utility, and that successful reforms in several other states were also more statist than often recognized. However, longer-term sustainability remains challenging. While weak rural lobbies had some effect, the study explains this trajectory as the result of the transition from one-party dominance to intensified party-political competition, a finding that resonates with evidence from other Indian states. In contrast to influential political theories developed in the Global North, this suggests that party-political competition does not make Indian politicians more likely to deliver public services, but rather leads to short-termism and political capture of utilities. Conversely, under some conditions one-party dominance can encourage longer-term reforms. The study thus assesses the promise and limits of public sector reforms as an alternative to liberalization, and suggests how electoral competition can influence development priorities in Indian states.

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Keywords: public sector reform, energy, infrastructure, India, public service delivery, electoral volatility

Highlights

- West Bengal developed a publicly owned alternative to the troubled global template for electricity liberalization
- West Bengal's reforms brought dramatic initial performance gains which then plateaued
- The study explains this decline as the result of intensified party-political competition
- This finding runs counter to Western predictions that party-political competition improves public service delivery
- In Indian states one-party dominance has often encouraged power reforms, but not broader public service delivery

1. Introduction

Access to reliable and affordable electricity is critical for virtually every dimension of economic and human development. Recognizing this, many developing countries have experimented with power sector liberalization in order to improve the efficiency of their struggling power sectors. In 1991 the Government of India took the first steps towards electricity liberalization. Yet, although the following quarter-century of intermittent reforms brought dramatic surges in generation capacity and rural electrification, India's electric power industry remains troubled. Voltage fluctuations and power outages are frequent, while 240 million Indians lack power altogether. An estimated quarter of all power generated continues to be lost, much of it to theft, worsening the sector's already perilous finances. By 2011 power sector debt had reached 5 percent of India's total GDP; in 2015 the central government announced a bailout program, the third since 2001. The liberalization process has similarly brought disappointments from Brazil (Tankha, 2009) to Uganda (Gore, 2017). Faced with persistent underperformance despite more than two decades of liberalization efforts, scholars and practitioners alike have begun to debate why power sector reforms have proven so difficult.

Electricity underperformance is not uniform across India, however. Constitutional responsibility for the crucial "last mile" of distribution to end consumers rests in the hands of India's state governments.[2] This arrangement has helped to create wide regional variations in

[2] Electricity falls on the constitution's "concurrent list" of subjects shared between the central and state governments. Long-term planning, key project approvals, and considerable generation and transmission capacity rest with New Delhi and its agencies. Distribution, and thus effective responsibility for much policy implementation, rests with the states.

power governance, and thereby opens up opportunities to use India's federal system as a "laboratory" for subnational comparisons.[3] In this vein, this article provides a comparative examination of the overlooked yet relatively successful case of electricity reforms in West Bengal, an eastern state of around 90 million people, lower-middle-income in Indian terms.[4] Based on 30 elite interviews carried out in 2016 in the state capital, Kolkata, alongside comparative evidence, it draws out key determinants of power reform success within India.

The dominant power reform prescription in India drew inspiration from the so-called "World Bank template" for electricity liberalization, as it came to be pejoratively labelled. Pioneered in England and Wales and disseminated internationally under the Bank's aegis, this aimed to improve utility efficiency through institutional restructuring, the introduction of independent regulators, and the disciplining effects of market competition.[5] In the 1990s and 2000s several Indian states adopted elements of the template, as did many other governments in the Global South, and in 2003 a related conception of liberalizing reforms was enshrined nationally with the passage of the Electricity Act. The results have been mixed at best. In Asia, Latin America, and sub-Saharan Africa, a number of analysts have outlined the flaws and unforeseen consequences of electricity liberalization, arguing that power deregulation ill fits settings outside the affluent, energy-rich societies where it was pioneered (Xu, 2004; Dubash & Singh, 2005; Tankha, 2009; Gore, 2017). The template's advocates maintain that this is the result of its incomplete application, often because "interest group pressures" inhibit reform (Joskow, 2008, 39).

These diagnoses open up two sets of questions: on reform *design* and the reform *process*, especially the deeper *political preconditions* that can facilitate reform success. The first critique challenges the ability of power liberalization to bring performance gains in Indian settings. Are there more effective power reform designs? The second foregrounds the significance of "interest group pressures" and other political obstacles. What explains the successful initiation and sustainability of reforms in some Indian states but not others?

In combination with comparative material from other Indian states, the West Bengal case illuminates both these questions. In 2005 West Bengal initiated a distinctively gradualist mode of power reforms with continued public ownership. This study first uses West Bengal to demonstrate the promise and limits of public sector reforms as an alternative to liberalization. Over the last two decades the reform of public sector enterprises has gradually risen on the

[3] On the value of the subnational comparative method, see Snyder (2001).
[4] In 2012–13 West Bengal's per-capita gross state domestic product was roughly twice that of the poorest state, Bihar, and half that of the highest performer (outside Delhi), Maharashtra. Figures from Open Government Data Platform India, https://data.gov.in.
[5] For an overview, see Joskow (2008). Its advocates always denied that it should be treated as a rigid 'template', though its application often resembled this in practice.

international development agenda, accounting for a small but increasing percentage of World Bank initiatives, for example. Yet public sector reforms remain less well analyzed than liberalization experiences. While some scholars suggest that reinvented public sector enterprises amount to a powerful alternative economic model that successfully solves older problems of state interference (Musacchio & Lazzarini, 2014), others argue they can never shake off their political masters to perform efficiently (Bremmer, 2010). This study shows that West Bengal's public sector reforms brought striking initial gains, as did the surprisingly similar reform trajectories pursued by the state of Gujarat, yet the longer-term protection against political capture that they provided was real but limited.

Second, the study examines various explanations for West Bengal's reform trajectory—initial gains that plateaued—alongside India-wide regional variations in power reform success. While the comparative weakness of rural lobbies had some effect, it finds a more compelling explanation in the transition from one-party dominance to intensifying party-political competition. Prompted by fiscal pressures, West Bengal's reforms were initiated under India's longest-lived state-level administration, headed by the social-democratic Communist Party of India (Marxist) (CPI(M), governed 1977–2011). Later reform backsliding coincided with increasing competition from the left-populist Trinamool Congress, which displaced the CPI(M) in the state elections of 2011. Against developed-country theories which link party-political competition to improved democratic accountability,[6] this study suggests at the Indian state level it is positively related to delivery of short-term, exclusive subsidies but *inversely* related to long-term power governance. This analysis is again reinforced with evidence from other Indian states. High electoral volatility correlates with short-term usage of electricity as a political sop. Conversely, power reforms, which deliver visible benefits more slowly and often bring tariff rises for key constituencies in the short term, are linked to electoral stability and the increase in politicians' time horizons it permits. However, power reforms are often motivated more by the drive to attract lucrative industry than to widen consumption, and so may not correspond with improved delivery of public services like health and education.

West Bengal's power experience thus suggests the promise and limits of public sector reform as an alternative to liberalization, and the importance of party-political competition in conditioning reform trajectories. Section 2 provides a note on methodology. Section 3 outlines Indian and international experience with power sector liberalization, the dominant model to which West Bengal is contrasted. Section 4 documents West Bengal's alternative, statist reform design, and assesses its success in improving power sector performance. Drawing on comparative evidence, Section 5 turns to consider the effects of party-political competition on

[6] The most famous progenitor of this theory is Key (1949).

power reforms, and draws some tentative conclusions for the study of subnational development as stable electoral regimes emerge in several hitherto-underperforming Indian states.

2. Methodology

This research began as part of a comparative collaboration that aimed to provide a state-level perspective on electricity governance across 15 major Indian states, home to 87 percent (1.06 billion people in 2011) of India's population and thus providing broad if not representative coverage of the country. Our team of power specialists together developed a shared methodology designed to provide accounts as readily comparable as possible. This comprised, first, a shared quantitative evidence basis based on key economic and electricity sector indicators. Second, we drew up a list of interviewee categories (such as locally significant energy activist groups) from a review of the secondary literature. We then developed a regionally customizable template to provide a flexible starting point for semi-structured interviews. Questions focused especially on power sector performance, the reform process and its effects, and the politics of the distribution segment (for example, tariff setting or government–utility relations).

In accordance with this shared methodology, the author conducted 30 semi-structured interviews in West Bengal's state capital, Kolkata, in July and August 2016. Interviewees were selected according to the preselected categories, with a preference for seniority where possible, facilitated by opportunistic "snowball"-style gathering of contacts. While the number of interviewees was comparatively small, with the obvious limitations that this entails, they included most of the key figures in West Bengal's "reform team" (senior civil servants, consultants, electricity regulators, and donor agency officials) as well as representatives of other constituencies (former power ministers, energy bureaucrats, utility officials, regulators, consumer representatives, business associations, union representatives, academics, and journalists). Interviews varied from 30 minutes to two hours in length—the median length was one hour—on a not-for-attribution basis to encourage candor. This data was supplemented with qualitative observations from a regional "energy conclave" hosted by a nationwide business association; documentary sources, including national and state-level policy documents, consultancy reports, and media output; and quantitative evidence from official sources.

The research team shared their interview transcripts, documentary materials, and preliminary versions of their respective findings in order to provide a collective pool of material across the 15 states. Based on such comparison, West Bengal emerged as an interesting case in two different dimensions. First, against the broad international trend towards electricity liberalization, West Bengal was a *deviant case*: it pursued its own, locally derived reform path that foregrounded internal insulation in the context of retained public sector ownership. The relative success of this reform design, acknowledged by both the Government of India and the

World Bank (Ministry of Power, 2013; Pargal & Banerjee, 2014), suggests it deserves systematic documentation as an alternative to the liberalization model more prevalent—but often less successful—across much of the Global South.

Second, for the key variable of party-political competition West Bengal is a usefully *extreme case*: the CPI(M)-led Left Front was India's longest-serving state administration, winning seven consecutive state assembly elections in a country otherwise famous for endemic anti-incumbency. Unrelated to its performance in the power domain (see below), the CPI(M) began to lose local elections from 2008 and was ejected from office in 2011. This sea-change in the state's politics provides a window on the effects of a shift from one-party dominance to intensified party-political competition.

This hypothesis is supported by comparison with other Indian states, and three in particular. First, Gujarat provides a "most-similar" case: it too has been characterized by one-party dominance, governed by Chief Ministers from the Bharatiya Janata Party (BJP) since 1998. In the power sector both Gujarat and West Bengal were lauded as most-improved electricity performers in national and international indices, at least until 2014 (Ministry of Power, 2013; Pargal & Banerjee, 2014; see Table 1). This is surprising: wealthy, business-friendly Gujarat more often treated as a "most-different" case to poorer, nominally socialist West Bengal, given their divergent growth trajectories, governing political ideologies, and attitudes to the central government (Sinha, 2005). Second, comparison is made with the most-different cases of Jharkhand and Uttar Pradesh, like West Bengal among India's poorer states, but where electoral turnovers have been especially frequent—and power reform outcomes have been assessed as among India's consistently worst. Together these cases, alongside briefer references to other major Indian states, provide a lens on the relationship between party-political competition and public service delivery.

3. The frustrations of electricity liberalization

The condition of the Indian power sector by the beginning of the 1990s mirrored the problems facing many developing countries (Victor & Heller, 2007). The industry was plagued by technical and financial underperformance, exacerbating chronic problems of underinvestment. Generation efficiency remained low and demand outstripped supply in many areas, leading to power rationing and blackouts. Tariffs for favored groups had become politicized: most Indian states subsidized agricultural and residential consumption, but failed to compensate their electricity boards—vertically integrated monopolies that handled generation, transmission, and distribution—for their lost revenue. Utilities were overmanned and widely regarded as extensions of the state bureaucracy. By 1991 cost recovery was only around 79 percent, and the situation looked increasingly untenable.

In 1991 the Government of India began "big-bang" economic reforms, with power generation the first major sector opened to private investment via independent power producers (IPPs). As in much of Asia, the IPP policy would prove ineffective at best (Dubash & Rajan, 2001). It failed to provide much new generation capacity, and was linked to a series of scandalous deals, most notoriously Enron's Dabhol plant in Maharashtra. The World Bank, then the sector's biggest lender, argued that this simple "add-and-stir" approach to increasing generation left the deeper problems of the industry untouched.

In the early 1990s, the Bank therefore fundamentally revised its approach to energy lending to encourage states to withdraw from involvement in day-to-day utility operations. Henceforth the Bank would lend only to Indian states that agreed to unbundle their vertically integrated electricity boards into separate generation, transmission, and distribution entities, facilitate private involvement in generation, and privatize distribution. Privatization was expected to bring in both new investment and, more crucially, a cultural change to tackle the problems of poor managerial selection and political patronage. Tariff adjustments were to be delegated to independent regulatory bodies, pluralistic forums where consumers and utilities alike could voice their interests. Eventually, market competition would force discipline upon the newly privatized and multiple power utilities. In this way the World Bank template offered a prescription to insulate utilities from government interference.

Elements of this template were gradually adopted across India. The first phase saw a series of state-level experiments, most famously in the poor eastern state of Odisha, an experience which sent foreign private investors fleeing from the Indian power sector and likely retarded rural electrification (Dubash & Rajan, 2001; Kale, 2014). The central government then gradually re-entered the fray, first legislating independent electricity regulators into existence and in 2000 with a comprehensive proposed Electricity Bill. With important local tweaks, independent regulation, unbundling, and especially competition remained pillars of the Electricity Act eventually passed in 2003.

In practice, the liberalization template—institutional restructuring, independent regulation, privatization, and competition—has only been partially applied in India. Although private firms now provide the largest share of power generated nationwide, only in Odisha, Delhi, and a handful of urban areas has distribution been privatized. Many Indian states have managed to thwart non-discriminatory "open access" to the grid for large private players, the key measure designed to improve competition and choice for both generation firms and consumers. In many, too, state-level electricity regulators have been quickly coopted by the executive and reabsorbed into the political systems they were designed to manage.

The results, as the introduction to this article suggested, have been correspondingly mixed. "The sector has come a long way," a 2014 World Bank review cautiously noted, praising

the completion of the national grid, the extension of rural electrification, and the tripling of generation capacity (Pargal & Banerjee, 2014, xiii). "Overall, however, the potential of the sector remains unrealized," both in terms of technical performance and financial sustainability. In the face of this persistent underperformance the onus of the reform prescription had shifted away from any fixed template. Instead, the Bank suggested that locally developed modes of reform "could… be beacons for others and are worthy of emulation" (*ibid*). It singled out West Bengal as such a "beacon," albeit one quite different to the original power reform blueprint to which the Bank's reputation had become tied.

4. West Bengal's alternative reform design: statist gradualism

In contradistinction to the troubled liberalization template, this section outlines West Bengal's distinctive reform design and evaluates its success. Driven by senior bureaucrats within the energy department and the public utility, the design aimed to *maintain state ownership* while mitigating its effects through institutional and technological mechanisms of *insulation internal to the utility* itself. The goal was to foster the utilities' financial and operational independence from the government both at the apex and by "reducing the human element" in day-to-day operations. This alternative to liberalization, which shared surprising elements with the successful reforms undertaken by the very different state of Gujarat, produced striking short-term success that subsequently plateaued.

(a) West Bengal's diagnosis

West Bengal appeared an unlikely reformer. It remained a poor, densely populated, nominally communist state with a long history of union activism and popular protest. As a result there was no powerful industrial constituency vocally demanding improved supply: West Bengal's share of Indian factory production had declined from 30 percent at independence to less than 6 percent by the early 1990s. Nor did it appear likely to heed central calls for reform, traditionally taking an oppositional stance to New Delhi (Sinha, 2005).

Nonetheless, the governing CPI(M) was more pragmatic than dogmatic, and West Bengal's dire fiscal situation was becoming increasingly obvious. By the 1990s its state government debt burden was among India's highest, worsened by a low tax collection ratio and the "communist premium" it paid to borrow. In 1994 Chief Minister Jyoti Basu (governed 1977–2000) adopted a "new" liberal industrial policy and began to compete for private and foreign direct investment, a trend accelerated by his replacement, the reformist Buddhadeb Bhattacharjee (2000–2011). The Left Front regime shifted to prioritize industrial (and thus revenue) growth over its loyal rural base: "Agriculture Our Foundation, Industry Our Future," as its 2006 election

slogan ran. In this vision, the availability of cheap, abundant power would be West Bengal's "USP [unique selling point]."[7]

Like the World Bank, West Bengal's power reformers admitted that government intervention had negatively affected sector performance. Yet they rejected the "one-size-fits-all" approach of the liberalization template.[8] Indeed, the reform process initiated in 2005 was explicitly informed by a months-long critique of previous reform failures in other Indian states by consultants who had seen these experiences first-hand.[9] Even as financial exigencies provided the impetus for improved efficiencies in state-owned enterprises, the party's nominally communist ideology encouraged reformers to "set aside" the most controversial elements of liberalization, "the ideological issues of the 'two Ps': pricing reforms and privatization."[10]

(b) The prescription: insulating public sector enterprises

Instead the core of West Bengal's reform model was to empower and upgrade the utilities themselves through improved and autonomous corporate governance and internal efficiencies. This had two key phases: (1) insulation at the apex, through the corporatization of management; and (2) insulation at the street level, by improving operational accountability. A key reformer explained the rationale:

> The first step was to isolate the utility—to the extent that the political economy allows—from political interference. We never believed the government would be out of the sector entirely: that's too optimistic given that the sector is government-owned and fulfills welfare goals. But we could keep it slightly at arm's length. You can only do this if you assure the government that the sector will be run well, because politicians have two interests in the sector: (1) the quality of service, and (2) the efficiency of the customer interface. If you falter in either of these the political executive takes note... In any case, both power theft and political interference are often only excuses for inefficiency within the utility itself. So our efforts were driven by internal reforms. All other desirable ends, like good consumer management, follow from this improved accountability system.[11]

The *sine qua non* was profitability, both to ensure financial independence from the government and to reassure politicians that the reforms were worthwhile.

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[7] Phone interview, donor agency official, August 3, 2016. All interviews were conducted by the author in and around Kolkata, India, unless noted otherwise.
[8] This phrase recurred both in interviews and in assessment exercises carried out at the time.
[9] Some had worked on power reforms as many as seven states; interview, consultant, August 18, 2016.
[10] Phone interview, donor agency official, August 3, 2016.
[11] Interview, former senior utility official, August 5, 2016.

Unlike the World Bank template or 2003 Act, profitability was not to be guaranteed through competition. Unbundling was considered merely "cosmetic," a means to streamline the utilities.[12] Informed by difficulties experienced by several early-reforming states, the West Bengal team determined that multiple discoms made little sense without private competition: it would exacerbate the scarcity of managerial talent, create bureaucratic transfer issues, and make regional cross-subsidization more problematic. Accordingly, in 2007 the vertically integrated West Bengal State Electricity Board (WBSEB) was split into a transmission utility and a single discom, the West Bengal State Electricity Distribution Company Limited (WBSEDCL).[13] The new utilities' books were cleaned with a state government debt write-off, while WBSEB's performance had also begun to improve before 2005. Reformers sought to leverage this to deliver visible improvements quickly, unlike the painful initial years that many states experienced. In this they were helped by the availability of fairly cheap power, enabling them to hold tariffs stable at first. While reforms in other Indian states and countries like Brazil were precipitated by crises, this indicates the value of acting in a moment of comparative fiscal breathing space rather than imminent collapse.

In place of competition, improved efficiency was to be guaranteed by imitating private sector conceptions of corporate governance. The key was "shadow listing:" drafting Articles of Association to comply with the recently published Clause 49, the Securities and Exchange Board of India agreement governing listing on the Indian stock exchange, without actual stockmarket flotation. This aimed to institutionalize an arm's-length relationship with the government, notably through the introduction of genuinely independent directors recruited from top-tier executives across India. Board meetings became multi-hour inquisitions. Behind closed doors even the eventual possibility of divestment was discreetly considered, which would have reinforced the utilities' independence from government even while providing a useful source of public revenues.[14]

Against the World Bank's emphasis on importing independent electricity regulators to depoliticize tariff setting, the West Bengal Electricity Regulatory Commission (WBERC, created in 1999) remained supportive but secondary. Key policymakers remained wary of the fundamental risk of political capture within the system of "the regulation of government by government."[15] Nonetheless, in practice WBERC often proved strikingly pro-utility, at least while key officials in both institutions were aligned in their long-term vision. The regulator was instrumental in consistently revising tariffs upwards between 2007 and 2011, and aimed to be

[12] Interview, former senior utility official, August 5, 2016.
[13] A separate generation entity had already existed since 1985.
[14] Interview, consultant, Gurgaon, Haryana, August 30, 2016.
[15] Phone interview, donor agency official, August 3, 2016; interview, former discom manager, August 5, 2016.

more light-touch and flexible than many other regulators, opting not to scrutinize every utility investment decision upfront but balancing the numbers annually.

WBERC also rejected the emphasis on civil society participation envisaged by the World Bank model of independent regulation. While the utilities enjoyed heavy representation on its advisory committee, around 2007 WBERC stopped holding public hearings, which tended to degenerate into "chaos," instead taking only written submissions and soliciting responses directly from established groups. Surprisingly, some consumer groups endorsed this decision, feeling the public understands too little about electricity to contribute much except kneejerk resistance to even modest tariff rises; in any case, bar sporadic attention around tariff hikes, public and media interest in the sector generally remains low.[16] When the utilities were functioning well between 2007 and 2011, this technocratic compact with the regulator worked fairly smoothly, but WBERC was later reluctant to allow the discom to pass on the cost of political interference or inefficiencies to consumers (see below).

If the first phase of reforms focused on structure and apex-level management, the second focused on the workforce. Aware that unions had succeeded in blocking reforms in other states, the reformers adopted a gradualist, consensus-building approach. In an earlier effort to improve West Bengal's precarious finances, a precedent had been set between 2000 and 2005 by the successful divestment—a euphemism for privatization—of "sick" public sector enterprises without significant labor opposition. The core personnel (both bureaucrats and PricewaterCoopers (PwC) consultants) for the power reforms assembled during this experience, which burnished their credibility. Several lessons would later be applied to electricity, not least the importance of devoting time to winning over unions and guaranteeing their pensions. Alongside this extensive internal stakeholder consultation, the decision was taken to keep a low media profile for as long as possible.[17]

Once employees were on board, the reformers turned to scrutinize business operations throughout the organization. Detailed job descriptions were drawn up to develop clear standards for performance monitoring. The bottom-heavy workforce was slimmed down, aided by a long recruitment freeze—between 2004 and 2016 the average employee age fell from 52 to 42—with the cooperation of engineers' unions.[18] Meanwhile the multi-layered administrative hierarchy was somewhat flattened through heavier reliance on outsourcing for tasks such as bill collection.[19] Instead managers sought to attract a smaller number of high-quality technical staff

[16] Interviews, consumer group, August 3, 2016; journalists, August 3 and 10, 2016.
[17] Interviews, former bureaucrat, August 11, and consultants, August 12 and 30, 2016; see also Lal (2010).
[18] "It was difficult for the bottom level of employees, but we understood the rationale," explained an engineer union representative; "there has been a culture change against the earlier phase of resistance." Interview, August 18, 2016.
[19] Interview, senior discom manager, August 18, 2016.

with some of the highest wages in the public sector, including the rare feat of hiring some specialists on contract.

Already precociously computerized, WBSEDCL also opted for technology-aided solutions to "remove the human element," a phrase which recurred throughout the interviews, or for tight monitoring where human interactions remained essential.[20] Taking advantage of central funding for automation, bulk consumers and urban feeders were equipped with remotely readable meters, providing real-time data to improve billing and catch theft. Through these measures the reformers sought both to shrink the costly bureaucratic apparatus and improve its accountability. A third phase of reforms, intended to integrate business processes through software-aided resource planning, began to lag, however—a harbinger of the decline in administrative capacity to come.[21]

In line with the CPI(M)'s socialist public ideology, the result of West Bengal's reform efforts remained conspicuously statist. Today transmission and most generation capacity (68 percent) remains in the hands of the state generation company; this compares with 36 percent in Maharashtra, 33 percent in Andhra Pradesh, and 28 percent in Gujarat, all wealthier and considered more business-friendly.[22] So too does distribution outside Kolkata and the Asansol–Raniganj and Durgapur industrial belts. Open access to the wires by private generators with surplus power to sell, a cornerstone of the 2003 Electricity Act, was "allowed in theory, but not in practice."[23] Deeming it impossible due to the need to cross-subsidize mass consumption, utilities have thus so far successfully lobbied the regulator for very high "wheeling" charges to discourage elite consumer exit. This rejection is common across many Indian states, however, even those often most associated with liberalization.

Nonetheless, West Bengal's reformers ruled out outright privatization on pragmatic grounds, *not* ideological. As the earlier privatization of PSEs and the willingness to debate eventual utility divestment suggest, debates around public versus private ownership were secondary to the desire for improved management and efficiency. The reformers incorporated management lessons drawn from the private sector and from pro-market critiques of the old style of public sector enterprise: the value of corporate governance norms, independent directors, independent consultancy and technology firms, and even lateral entry from the private sector for individual specialists (hitherto unthinkable in India's seniority-driven bureaucracy). At the substation level key service delivery tasks were outsourced to private contractors, to the chagrin

[20] For example, interview with former power minister, August 10, 2016.
[21] Interview, consultant, August 30, 2016.
[22] Central Electricity Authority data, September 2016. Since 2012 the West Bengal state's share of power *sales* has declined, however, as despite its higher cost officials have been unwilling to renege on agreements with the central generator NTPC. Interviews, former utility manager, August 7, 2016, and former power minister, August 10, 2016.
[23] Interviews, former regulator, July 21, 2016, and regulator, August 12, 2016.

of some public sector employees.[24] The result was thus a discreet hybrid, even while the visible trappings of public ownership were retained.[25]

(c) The statist reform model as an alternative to liberalization

Until 2010–11 the West Bengal model proved strikingly successful on several metrics, from financial performance to rural electrification. From annual losses of US$300 million in 2002, by 2011 it had become one of only three states with (marginally) profitable discoms, with revenues more than covering the cost of supply without the need for substantial government subsidies (Table 1). Automation and improved vigilance saw T&D losses—often treated as a key indicator of utility efficiency and power theft—drop dramatically from around 40 percent in 2001 to a low of 23.2 percent in 2007–8, albeit a level still considerably higher than that achieved by Gujarat's reformed utilities and one not sustained after 2009 (Figure 1).

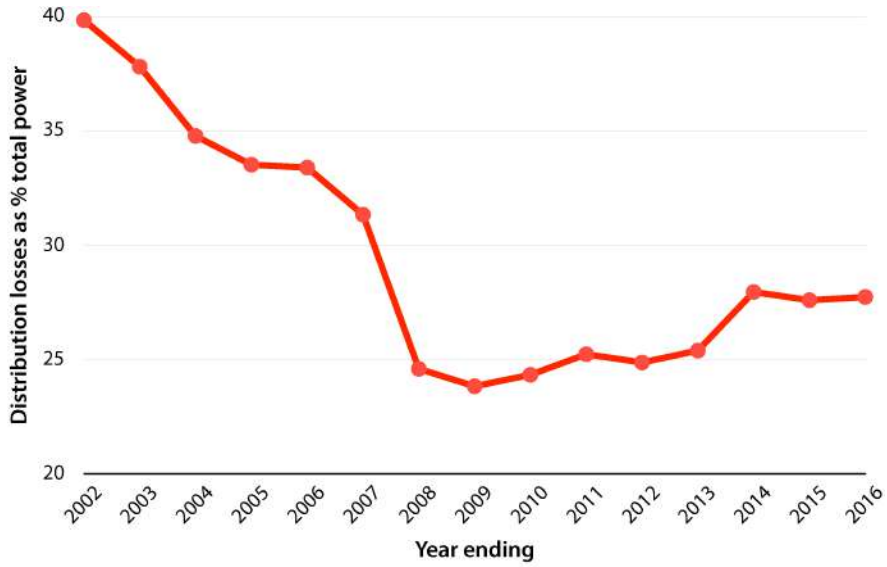
The most dramatic improvement came in rural electrification. Drawing on a heavy central subsidy injection, the CPI(M) administration belatedly initiated rapid grid expansion. Between the 2001 and 2011 censuses the proportion of rural households using electricity as their primary light source doubled from 20.3 to 40.3 percent, with connections rising from 3.57 million to 8.57 million. This still left West Bengal a laggard, but outperforming other major states with low levels of rural electrification.

Official indices recognized the scale of these achievements. In an extensive national review the World Bank singled West Bengal out as an example of best practice in utility governance and operational efficiency, a dramatic turnaround matched only by Gujarat (Pargal and Banerjee, 2014, 112–13). In the Government of India's first formal assessment, WBSEDCL similarly received an "A" grade, behind only Gujarat's four unbundled discoms (Ministry of Power, 2013; Table 1). As one World Bank manager wrote, West Bengal's power sector thus offered an example of a "flawless reform programme, with important theoretical insights" (Lal, 2010, 114).

Figure 1. Initial gains trailing off: West Bengal state discom T&D losses, 2002–2016

[24] WBSEDCL engineers have raised concerns about the weak oversight of substation-level outsourcing of tasks like billing, especially given its rapid rural expansion; there have been several cases of subcontractors taking money to deliver connections that never materialized. The third-phase software-based upgrading also relied heavily on Tata Consultancy Services, who controlled access to the system; WBSEDCL employees warned that this dependence risked becoming permanent and successfully petitioned for its transfer. Interviews, engineers' union representative, August 18, 2016, and consumer group representative, August 3, 2016.

[25] For a larger-scale Indian example of reinvented public sector enterprises incorporating ideas about private-sector corporate governance, see Chatterjee (2017).



Source: WBSEB and WBSEDCL (unbundled discom) annual reports, various years[26]

Table 1. West Bengal in comparative perspective: other select electricity indicators

	West Bengal	Gujarat	Uttar Pradesh	Jharkhand
(1) Per capita electricity consumption (kWh, 2012)	564	1663	450	790
(2) Industrial consumption (%, 2015)	26.25	47.21	24.37	36.28 *[2013]*
(3) Industrial revenue (%, 2015)	31.73	62.15	39.85	54.35
(4) Rural household electrification (%, **2001**)	20.30	72.10	19.80	10.00
(5) Rural household electrification (%, **2016**)	92.00	93.70	30.41	36.67
(6) Subsidy to discoms (Rs millions, 2015)	0	11,010	98,030	21,120
(7) Discom rating,* (2013)	A	A+, A+, A+, A+	C+, C, C, C, C	C+

* After unbundling states may have more than one distribution company, hence multiple ratings.

Sources: (1) Planning Commission (2014: 18); (2), (3), (6) Power Finance Corporation (2016); (4) 2001 Census of India; (5) West Bengal and Gujarat data from National Family Health Survey, Jharkhand and Uttar Pradesh data from Government of India Garv portal; (7) Ministry of Power (2013).

[26] T&D loss data vary from source to source and are notoriously unreliable, as suggested by the fact that around 2000 losses abruptly rose India-wide not as the result of increased theft but more accurate data collection. This figure should only be used to visualize broad trends.

The strength of hybrid, statist reforms like West Bengal's, in contrast to outright liberalization, is also attested by the striking similarities found in a very different state, Gujarat, typically treated as a dramatic contrast to West Bengal (Sinha, 2005). While West Bengal is an industrial laggard with administrations publically ambivalent to both economic liberalization and central initiatives, wealthy Gujarat is India's most iconically industry-friendly state and has been governed by the rightwing Bharatiya Janata Party (BJP) for the past two decades. Yet power reforms in "pro-business" Gujarat have as much in common with Bengali statism as the World Bank template. Like Bengal, Gujarat's successful reform process concentrated on improving utility autonomy through financial restructuring, process streamlining, and technological fixes. In both states civil society engagement in the regulatory process has taken a backseat to upgraded management capacity. Meanwhile, both resisted the most controversial elements of liberalization such as open access, and avoided direct confrontation with unions in favor of a gradualist approach that sought to win over public utility employees (Madhavan, 2012).

Despite their ideological differences, West Bengal and Gujarat thus appear to offer two different iterations of a technocratic alternative to the World Bank template's emphasis on market competition via privatization, independent regulation, and civil society participation. The two states' focus on management rather than ownership appears prescient in the wake of liberalization's high-profile failures in other states. In Odisha, the pioneering privatizer where power reforms were loudly publicized, each of the four distribution companies is now back in public hands. In the huge northern state of Uttar Pradesh, frequently cited as a cautionary tale by West Bengal's reformers, the creation of five discoms and two abortive attempts at privatization have failed to improve the utilities' dismal financial and operational performance. In the face of the liberalization template's failures, the two states together show the sustainability of taking a pragmatic, gradualist approach to win over powerful interest groups like engineers' unions while avoiding the most politically controversial aspects of liberalization. These cases suggest that successful change in the sector has relied on bolstering public utilities rather than merely demolishing them. They show the potential gains offered by gradualist reforms directed more at improved public sector governance than the controversial prescription for privatization of the liberalization model.

(d) The difficulty of sustaining performance improvements

Nonetheless, reforms in West Bengal came at a high political cost. The Left Front had banked heavily on the hope that improving the investment climate, including through reliable electricity, would bring dividends. But improved power performance came too late to prevent the popular backlash against the CPI(M)'s pro-industrial reforms. Its apex-led, technocratic governance style may have begun to deliver in the power sector, but the general pro-industry and top-down tilt

over local responsiveness—"smug unilateralism," in one commentator's phrase (Bhattacharyya, 2016, 207)—came at the cost of the CPI(M)'s overall moral and political credibility. By 2008 more than half of Bengali villages would be in opposition hands, and in the 2009 national elections the party lost two-thirds of its Lok Sabha seats (Table 2; see below). In the 2011 election, after 34 years in office, the Left Front government was dismissed from power in favor of Mamata Banerjee's Trinamool Congress.

The decline in the CPI(M)'s electoral fortunes coincided with a decline in utility performance that calls into question the reforms' longer-term sustainability. Upon taking office new Chief Minister Mamata Banerjee felt she had little choice but to block tariff revisions despite misgivings: "Do not talk to me about tariffs," she instructed her staff.[27] Delays to tariff hikes would recur before the most recent state election in 2016. Meanwhile, after their earlier steep fall, T&D losses had begun to climb again as early as 2009 and continued to rise (Figure 1). The revived political pressure was often indirect: "I never received a phone call from the chief minister or anything like that," explained one former regulator. Instead, both WBSEDCL and the private CESC "voluntarily" moderated their tariff petitions before elections.[28] This was exacerbated by a widely perceived decline in the quality of personnel, virtually as a matter of policy in order to make the agencies more tractable.[29] The regulator was left with only one member and without a chairman for almost two years, though during this time it fought a rearguard action against institutional decline (see below). A senior bureaucrat admitted: "The utilities are not at all independent. We are poking them at least eight times a day, eight hours a day."[30]

As a result of these trends, since 2011 WBSEDCL's finances have rapidly deteriorated. Belated tariff hikes could not keep pace with the increasing cost of employee salaries, interest payments, or power procurement. WBSEDCL increasingly resorted to short-term borrowing to finance even everyday operations; its credit rating was downgraded as a result.

Nonetheless, signs of reform resilience within the bureaucracy remained. As WBSEDCL's losses began to mount in the Trinamool administration's first months, the original reformers mobilized to intervene via the Chief Minister's trusted lieutenants. They warned that power cuts would hit key school examinations, an event of major cultural significance in West Bengal, and even permitted limited cuts to begin to illustrate the situation's seriousness.[31] After long consideration, Banerjee agreed to tariff revisions and nominally foreswore further political interference. Reformers saw this as a victory for long-term thinking, although it suggests that

[27] Interviews, former senior power officials, August 5 and 11, 2016.
[28] Interviews, former regulator, July 31, 2016; regulator, August 12, 2016.
[29] Personal communication, former power official, August 11, 2016; interview, regulator, August 12, 2016.
[30] Interview, August 19, 2016.
[31] Interview, former senior discom official, August 4, 2016.

reform sustainability has relied on the personal commitment and authority of individuals rather than institutionalized checks.

The regulator, WBERC, has also provided a source of modest resistance, despite attempts to degrade its operations. It took a stand on the issue of "regulatory assets," alleging that WBSEDCL's marginal on-paper profits in recent years relied on misclassifying a significant sum stemming from discom inefficiencies—creative accounting that also prompted a respected discom board member to resign. Even discom staff appear to have internalized reformed professional norms. Managers still envisage their enterprise as "a professionally managed organization, not a government entity," even if they remain realistic about the negotiated character of their independence.[32]

Nor has political interference been as heavy-handed as in some other states. Officials still generally serve out their tenures and tariff rises have belatedly occurred. In any case, it is possible to overstate the contrast with the CPI(M): power theft was already rising again before 2011 (Figure 1) and still remains below pre-reform levels. West Bengal's deterioration is thus only relative. As one reformer argued: "From the outset we always had doubts about sustainability. It's true that the sector is not at the level it rose to, but it is considerably better than the level that we started at."[33] The public sector reform model thus provided some, albeit limited, protection against renewed political interference. The following section seeks to explain this performance trajectory—dramatic initial gains that subsequently plateaued—and the light it sheds on the political preconditions and constraints on (sustained) reform success.

5. Party-political competition and power reforms

A variety of explanations for regional variation in power reforms within India have been offered, from the varying strength of rural or industrial lobbies to the level of economic development. Examining West Bengal's experience alongside comparative evidence from other states, this section posits instead that electoral (in)stability has a determining effect. Specifically, intensifying party-political competition leads to shorter political time horizons and thus decreased electricity performance, inhibiting power reforms in particular. Conversely, one-party dominance can open a window of opportunity for power reforms by permitting state leaders to take a longer-term perspective. This leaves the puzzle of *why* some politicians might forego short-term electoral rewards for more uncertain longer-term gains. The section concludes by exploring the factors that determine whether and when political leaders opt to initiate reform. These factors vary from state to state, but have interesting implications for the interaction between political stability and development priorities.

[32] Interviews, senior discom manager, August 18, 2016; donor agency official, August 3, 2016.
[33] Interview, former senior discom official, August 5, 2016.

(a) Explanations of electric divergence

The varying pace of power reforms across Indian states presents a puzzle. It is not simply a matter of widening divergence between high and low economic performers (Kochhar et al., 2006): some states that are otherwise comparatively wealthy and industry-friendly have power sectors characterized by huge financial losses and frequent power outages, as in the case of Tamil Nadu. Nor is it enough that a powerful industrial lobby exists, clamoring for reform (Pedersen, 2000). West Bengal reformed despite the absence of a powerful industry presence, due to both its nominally socialist ideology and historical accident: since colonial times Kolkata and the state's coal-rich industrial belts had been monopolized by utilities outside the state government's control, so there existed only a shrunken industrial constituency to demand power reforms. As shown by West Bengal's bold reforms under the CPI(M) and their surprising similarity to those in pro-business Gujarat, governing ideology (Kapur, 2004) also struggles to explain this variation.

The most influential explanation posits that farmer lobbies, typically enjoying heavily subsidized electricity access, are the "winners" from the present system and so have blocked power reforms in the states where they are most powerful (a thesis most forcefully expounded in Kale, 2014). With powerful farmer lobbies, wealthy Punjab and Tamil Nadu found agricultural subsidies politically impossible to dismantle and never seriously considered electricity reforms. Most strikingly, the 2004 electoral defeat of perhaps India's most vocal liberalization advocate, Chandrababu Naidu, in the southern state of Andhra Pradesh was widely regarded as the result of his attempts to cut agricultural power subsidies; within hours of taking office his replacement immediately granted free power to farmers (Kale, 2014, 151–70). In contrast, the early pioneer Odisha had an unusually weak base of rural electrification, while the only other territory to privatize distribution, Delhi, was unusually urban.

West Bengal provides some support for this hypothesis: its weak farmer lobbies and belated rural electrification meant it escaped becoming locked in to expensive agricultural subsidies. The reason was in part geological—its wet climate meant that agrarian irrigation was less of a priority than in drier regions—and in part a response to the absence of lucrative industrial consumers to cross-subsidize rural electrification. CPI(M) policies also inadvertently helped to prevent the emergence of powerful farmer lobbies. The party's famous land reforms created an agrarian class with significantly smaller holdings than their counterparts elsewhere, while the CPI(M)'s disciplined organizational structure also helped to head off rural pressure (Bhattacharyya, 2016, 123–154). Overall agricultural consumption remains low (less than 10 percent of connected loads), and West Bengal's power sector thereby largely escaped the

problem of low agricultural tariffs that plagued southern and western states. This rural neglect would later facilitate power reforms unthinkable in many other states (Mukherji, 2006).

Nonetheless, comparative evidence suggests this was a useful but not a sufficient precondition for reform. Jharkhand has struggled to reform its power sectors despite also having low agricultural load. Meanwhile Gujarat, India's most widely acknowledged electricity success story, managed to reform despite its powerful farmers' associations. Kale notes that Gujarat's experience shows that the farmer lobby thesis is "conditional," and "disciplined party and bureaucratic structures can successfully dismantle a prevailing order" (2014, 162). The following analysis suggests that varying levels of party-political competition provide a valuable supplement to the rural lobby thesis, helping to explain when state-level politicians will or will not take on powerful coalitions of potential reform "losers."

Table 2. CPI(M) and Trinamool Congress seat share and vote share in West Bengal elections, 2001–2016

		Election						
		2001 *State*	**2004** *National*	**2006** *State*	**2009** *National*	**2011** *State*	**2014** *National*	**2016** *State*
CPI(M)	**Seat share (%)**	48.6	61.9	59.9	21.4	13.6	4.8	8.8
	Vote share (%)	36.6	38.6	37.1	33.1	30.1	23.0	19.8
Trinamool	**Seat share (%)**	20.4	2.4	10.2	45.2	62.6	81.0	71.8
	Vote share (%)	30.7	21.0	26.6	31.1	38.9	39.8	44.9

Results from the Election Commission of India, http://eciresults.nic.in/

(b) Party-political competition and power reform outcomes

The trajectory of West Bengal's electricity sector since 2000, a precocious local reform model offering striking initial gains which subsequently tailed off, provides a useful window on the interaction of party-political competition and power reforms. A post-poll voter survey found that the CPI(M) was voted out not because of its governance record—in fact, the improved electricity supply was popular—but for betraying its pro-poor ideology, most notoriously through coercive state land acquisition for industrial projects at Nandigram and Singur in 2007 (Bhattacharyya, 2016, 224). This suggests that the changing level of party-political competition was exogenous to the transformation of the power sector itself.

Crucial for facilitating West Bengal's power reforms was the one-party dominance of the CPI(M), which governed for 34 years until 2011. In its reform efforts the CPI(M) was able to

draw on its unique organizational strength and the durability of its class coalition, bolstered by a system of local clientelism. It was a well-disciplined, cadre-based organization with a centralized hierarchy that vested substantial power in the Chief Minister. The regime also benefited from tight links with the senior bureaucracy, fostered in part by its sheer longevity: key power reformers later described a process of "negotiation" with a receptive apex, in which they well understood how best to couch their suggestions to appeal to long-serving politicians.[34]

Nonetheless, the CPI(M) system was far from a Weberian bureaucracy. Despite never winning more than half of all votes, its domination at the state level was near absolute. Its grip at the grassroots relied on formal decentralization through the *panchayati raj* system of local government, introduced almost as soon as it took office, and on a grassroots system of patronage and dispute arbitration. The CPI(M)'s success therefore rested on the party's ability to mediate between these two levels: the "elevated" domain of centralized, top-down policymaking and the "embedded" domain of dispersed, everyday clientelism, especially among poor voters in rural areas (Bhattacharyya, 2016).

Together this centralized decision-making, bureaucratic embeddedness, and popular clientelism helped to inform a distinctive mode of reforms. The CPI(M)'s political domination and hierarchical state-party apparatus gave the Chief Minister the latitude and authority to push for major policy change with the eventual goal of industrialization. Yet, if the embeddedness of the party-state provided the CPI(M)'s influence, reformists also argued that it risked hollowing out official institutions. Bhattacharjee publicly acknowledged that corruption and high-handedness among local satraps and bureaucrats was becoming a serious concern (Mukhopadhyay, 2001). This pushed the regime to attempt to restrict the influence and "embeddedness" of the party-state, especially its lower apparatus. Insulation was therefore a key priority, shaping the distinctive statist reforms outlined in Section 4.

Nonetheless, West Bengal's power reforms could not sustain momentum as party-political competition intensified after the Left Front's local election defeats in 2008 (Table 2). In 2011 the Trinamool Congress swept to a majority, winning over much of the Left Front's hitherto resilient base of sharecroppers and small cultivators alongside its older support among the urban lower-middle classes and small businesses. Yet the Trinamool regime faced quite different political challenges. While the CPI(M)'s longevity had given its leadership the (perhaps misplaced) confidence that it could take long-term decisions, the new administration was conscious that it was operating in a formidably competitive political space. Nor did new Chief Minister Mamata Banerjee instantly trust the senior bureaucracy, given its long association with the patrician CPI(M) elite. The combination of a base among the "intermediate classes"—rural

[34] Interviews, former senior power sector officials, August 5 and 11, 2016.

smallholders and the petty bourgeoisie—and fierce competition for votes helped to shape its populist stance towards the power sector.

For much of Trinamool's first term it accordingly prioritized pro-poor expansion through both informal and formal channels. On the one hand rural electrification has accelerated still more dramatically. By the 2015–16 one survey alleged this had leapt to 92 percent (Table 1), and officials believed 100 percent household electrification to be imminent. On the other, the government apex has at least indirectly pressured the utilities and regulator to delay tariff rises around elections, undermining a core pillar of utility independence.

Moreover, Trinamool is not the disciplined machine that the CPI(M) was, for all its flaws. United by opposition to the CPI(M) rather than a coherent platform, and virtually synonymous with Mamata Banerjee, it is more weakly coordinated. The reformers thus "realized that there are problems that Mamata cannot control; political will won't stretch downwards to solving problems of disconnections or theft."[35] Since 2011 T&D losses have begun to climb again at a rate that cannot be attributed solely to technical losses from expanded rural electrification (Figure 1). In several areas police are reportedly refusing to intervene against power theft, and many interviewees now characterize the power sector's problems as a law-and-order issue. Given that elsewhere in India tolerance of theft has been shown to be politically driven (Min & Golden, 2014), this might be considered an informal power subsidy distributed by local satraps as they attempted to dislodge the CPI(M)'s hitherto robust rural party-machine, with some success. If one-party dominance facilitated West Bengal's power reform efforts, then, an intensification of party-political competition led to reform backsliding.

A somewhat similar pattern can be seen in Delhi, which opted for a locally developed program of unbundling and privatization under the stable Congress administration of Sheila Dikshit, Chief Minister from 1998 to 2013. This brought performance improvements, notably in reducing T&D losses, but at the cost of unpopular higher residential tariffs and mounting regulatory assets (an accounting euphemism for unrecovered dues). The dramatic electoral rise of the anti-corruption Aam Admi Party in a short-lived minority administration (2013), a period of President's Rule by the center (2014), and a majority administration (from 2015) has brought the populist politicization of tariffs and back-and-forth contests between the administration, regulator, and courts. As in West Bengal, intensifying party-political competition has undermined power reforms—though in Delhi electricity itself has become a key electoral issue.

The other top electricity reform performer, Gujarat, enjoyed a similar combination of electoral dominance and a highly disciplined subnational regime. In the 1990s, its electricity board faced an unpropitious combination of tight finances and an unfavorable load balance:

[35] Interview, former power official, August 11, 2016.

industry in 1999–2000 comprised only 29 percent of consumption, similar to West Bengal's figure today (Table 1), while agriculture's share stood at 48 percent and went unmetered (though this was likely an exaggeration concealing some power theft). Two-party competition between the Congress and BJP gave way in 1998 to an unbroken period of BJP rule, facilitating reforms in spite of the state's powerful farmer lobby. Under Narendra Modi (governed 2001–2014), like Bhattacharjee a reform-minded Chief Minister heading a centralized administration, Gujarat pursued a successful power reform program that balanced winning over employee unions with a similar emphasis on ensuring utility independence, albeit with greater private participation in generation (Section 4). Unlike West Bengal, its one-party dominance for the moment continues, and with it the state's robust electricity performance.

Conversely, the worst performing utilities are concentrated in states with intense party-political competition. In the giant state of Uttar Pradesh, multi-party competition between the BJP, Samajwadi Party, Bahujan Samaj Party, and Congress has led multiple single-term political administrations to repeatedly initiate consultations on the prospect of power reform, only to back down and opt for populist compromises once again. Non-industrial tariffs remain well below the cost of recovery, as politicians seek to avoid any reduction in subsidies for numerically powerful groups like farmers and weavers. T&D losses remain higher than West Bengal's, as they prove reluctant to crack down on theft channeled to key constituencies (Min & Golden, 2014).

The coal-rich eastern state of Jharkhand presents an even more extreme case of party-political tumult: it has seen ten chief ministers and two periods of President's Rule in 15 years. In this setting politicians' time horizons appear still further constrained. Rather than even opting for populist buy-offs, let alone long-term planning, parties and coalitions in power have opted to extract rents from the large, capital-intensive projects that characterize the power system.[36] As a result Jharkhand's village and household electrification levels are among the lowest in the country, while its utility has wrestled with mounting losses.

This pattern is not confined to these two notoriously low-performing states or where competition is two-party rather than multiparty. Electricity in Rajasthan, where the BJP and Congress have alternated in power since 1990, remains plagued by low tariffs, high theft, and heavy financial losses. Even states which otherwise perform significantly better than West Bengal on most development indicators have struggled with power reform. Comparatively wealthy Punjab, now in a three-way electoral contest, has seen waves of populist competition to extend power subsidies (Birner et al., 2011: 108–129). Most strikingly, the two political parties that alternate in power in Tamil Nadu compete to offer increasingly extensive and expensive subsidies, throwing the state utility into financial disarray, despite the fact that it is often

[36] I thank Rohit Chandra for this observation.

considered one of India's most industrially successful states. It thus appears that party-political competition and power reforms interact across many Indian states.

(c) Electricity, electoral competition, and political time horizons

The introduction noted that influential theories of democratic accountability, largely derived from the study of affluent societies, hold that party-political competition makes politicians more responsive and likely to deliver collective goods, amongst which electricity is often included (Key, 1949; see Kitschelt & Wilkinson, 2007, 1–2). Some have applied related arguments to India (Besley and Burgess, 2000; Singh, 2016, 229).

Scholarship on Indian electricity challenges this benign interpretation, however, instead emphasizing the problem of time inconsistency. The incentives for long-term investments do not perfectly align with the time horizons of democratic politicians: they may not offer visible benefits until far into the future. Democratic politicians' concern with reelection "induc[es] an emphasis on maximizing short-term gains"—highly visible village electrification or streetlight installation schemes, for example—"and away from the kind of long-term investments that require fiscal sacrifices in the present," such as maintenance and new generation capacity (Min, 2015, 33). Against the developed-country theory that party-political competition improves service delivery, this study's findings support existing India-derived arguments that high electoral volatility correlates with short-term usage of electricity as a political sop (Min, 2015; Chhibber & Nooruddin, 2004).

Yet the present study also suggests a controversial extension, providing evidence that the inverse might also be true: one-party dominance in democratic systems may permit longer political time horizons. In contrast to short-term subsidies that aim to secure the support of key voting blocs, power reforms aimed at fiscal and technical sustainability require longer time horizons and offer fewer immediately visible benefits to voters. In fact, reforms of the type documented here are counterintuitive: not only do they risk alienating powerful constituencies who would see their tariffs rise, but the decision to insulate utilities from political interference restricts politicians' control of rents.

When and why do politicians change their horizons in this way, tying their hands on the distribution of short-term patronage in the hope of securing long-term advantage? This is a question that deserves further research, but we can draw out some speculative threads from the preceding analysis.

One-party dominance is not sufficient to secure improved power performance. West Bengal under the CPI(M) in the years after 1977 has been seen as India's archetypal "social-democratic" regime (Kohli, 2012), but despite its nominally socialist ideology the Left Front government did little to deliver high-quality power or mass electrification until the 2000s. The

2001 census recorded a rural household electrification rate of only 20.3 percent, well below the all-India average of 43.5 percent. Its persistent neglect of rural electrification illuminates the shallowness of the CPI(M)'s agrarian and pro-poor reforms in practice. This is arguably the cost of its assured grip on power for so long, under a leadership dominated by urban, educated, upper-caste elites (Kale, 2014, 170–5)—and might be seen to reinforce the theory that party-political competition brings democratic accountability.

What sparked the turn to power reforms in the early 2000s, then? If they can outlast short-term electoral backlashes, improved electricity offers politicians the prospect of *long-term* advantages, a theory reinforced by interview evidence. Improved electricity—both power reforms as a pro-industry signal and reliable power as an industrial input—can help to attract large industry, now an increasingly crucial source of government and utility revenues, political legitimacy through employment creation, and (less benignly) of the economic rents that provide Indian politicians with the vast resources they require to run for reelection. In West Bengal the decision was perhaps especially stark. While its power sector was not itself in crisis when reforms began, overall it was the most heavily indebted of Indian states. By the early 2000s its rapid agricultural growth had begun to taper off, forcing it to look for an alternative, pro-industry strategy to mobilize new rents, despite the ruling party's hitherto publicly anti-capitalist ideology. Ruling parties with less ideological baggage, like the BJP in Gujarat, could embrace this calculus still more easily.[37]

This analysis points in both positive and negative directions. For West Bengal, it may be encouraging. In 2016 Trinamool returned to office with an even more decisive mandate (Table 2), supported by mass defections of CPI(M) local cadres. The decisive confirmation of five more years in power and the collapse of the CPI(M) vote may mark at least a temporary end to the period of intense party-political competition, and so increase the political leadership's perceived latitude for long-term decision-making. In theory, then, the administration will be more likely to move away from short-term sops and towards a more ambitious development agenda. This is especially true as the same structural exigencies that impelled the CPI(M)'s break with its pro-poor ideology begin to bite once more. As in the 2000s, the drive for industrialization and private investment has again become paramount to provide jobs and, not least, to burnish government revenues. West Bengal's debt-to-GSDP ratio remains the worst of any major state and interest

[37] Even more interesting is the case of Karnataka, where fierce party-political competition has not stopped a bipartisan consensus emerging on the necessity of regular tariff hikes alongside redistribution between state utilities. Something similar could be said of Odisha's initial, bipartisan decision to liberalize power in the early 1990s. Under what conditions does such *cross-party* consensus on development priorities emerge? Singh (2016) explains such consensus on social policy as the result of strong subnational solidarity, but the patterns she detects do not hold for the case of electricity.

payments eat up more than a fifth of its revenue expenditure.[38] Trinamool has thus rehabilitated the CPI(M)'s old hope: that quality electricity can lure in revenue-boosting industry, which bolsters the case to avoid political interference in utility operations or tariff setting.[39] Some within the administration have even suggested that electricity cross-subsidies could be dropped altogether.[40] In this way the *imagined* constituency of future industry chases out the use of electricity as a "sop" for existing interest groups, the focus of scholarly analyses to date.

The prioritization of electric development over electric sops is reinforced by a body of political science literature which suggests that rising consumer expectations may encourage a shift away from short-term clientelism to rewarding more sustained and programmatic "good governance" (Wilkinson, 2007).[41] Indeed, such shifting goalposts gave rise to a common complaint among CPI(M) leaders and cadres, reported one anthropologist: "*bostey diley chutey chai* [if you invite them to sit down, they want to lie down]" (Banerjee, 2010, 250). Especially in urban areas, as the quality of service rose so did increased consumer expectations and sensitivity to even short disruptions. With 100 percent household electrification imminent, power sector officials widely acknowledge that policy objectives must shift from basic provision to *quality* of supply. Efficient management will therefore become a rising priority.

Less positively, the rewards that politicians may expect from taking a longer-term view of the power sector do not always materialize in practice. If Chandrababu Naidu's 2004 ejection from office in Andhra Pradesh indicated the perils of alienating key constituencies by trimming short-term benefits, the example of the CPI(M) shows that even public recognition of successful power reforms is not sufficient to guarantee reelection. More than this, power reforms do not alone provide the silver bullet to draw in lucrative industry. West Bengal's plateauing power consumption—like many other states it now nominally enjoys a power surplus as demand growth has failed to keep pace with projections—suggests that its failure to attract industry has persisted even into the era of improved power supplies. Industrialists and others instead call for other policy shifts, especially around land acquisition and other infrastructural bottlenecks.[42] Without such rich cross-subsidizing consumers the power sector's future itself now lies in doubt. As one interviewee evocatively asked: "Can an island of excellence survive where everything

[38] Figures from Niti Aayog, http://niti.gov.in/state-statistics (last accessed October 20, 2016). The administration has therefore resisted signing onto the centre's Ujwal Discom Assurance Yojana (UDAY) financial restructuring scheme, as this would simply heap the discom's debts upon the state government's own distressed books.
[39] Interview, regulator, August 12, 2016.
[40] Interviews, former discom manager, August 7, 2016, and senior power bureaucrat, August 19, 2016.
[41] Surveying rural Bengal, Bardhan et al. (2009) already found that providing one-time benefits did not succeed in winning voter loyalty, while recurring benefits and broad-based changes did.
[42] Now that reliability has improved, industrialists do not consider electricity a primary issue; interview, industry lobbyist, August 8, 2016.

else sucks?"[43] If the long-term benefits seem so uncertain, politicians may either further hesitate before embarking on power reforms, or determine that they will succeed only in the context of a broader pro-industry policy turn.

The latter point raises an ominous caveat about the relationship between party-political competition and public service delivery. Some of India's poorest states now have comparatively stable administrations under long-lasting Chief Ministers, including Madhya Pradesh (Shivraj Singh Chouhan, since 2005), Chhattisgarh (Raman Singh, since 2003), Odisha (Naveen Patnaik, since 2000), and Bihar (Nitish Kumar, since 2005, with a short break). Such electoral stability ought to facilitate power reforms in these states—as is indeed gradually occurring, in contrast to Uttar Pradesh and Jharkhand.

This study has also suggested, however, that power reforms are often motivated more by the drive to attract lucrative industry than to increase access or affordability. Indeed, for poor governments, the choice to extend electricity to new groups unable to pay the full cost of supply is an expensive one that may further imperil their utilities' already precarious finances and so discourage industrial investment. This is directly visible in Madhya Pradesh, where huge capacity additions have improved power quality for existing consumers and the state government hopes to sell on a surplus, but access and affordability remain low or have even declined. More optimistically, after popular protests in 2011, Bihar has embarked on an ambitious program of power reform *and* household electrification, albeit one reliant on continually low power prices and heavy state subsidies. This suggests a mixed picture for India going forward. Power reforms under one-party dominance may not correspond with improved delivery of public services like health and education. While one-party subnational regimes may offer more effective and long-termist industrial development, the very precondition of their success undermines the move towards a more accountable and democratic human developmental state.

6. Conclusion

This article has used evidence from the understudied case of West Bengal to shed light on power sector underperformance, which persists across much of the Global South despite years of reform efforts. Elsewhere these reforms have often taken the form of liberalization, but West Bengal's locally developed design presents a useful alternative model of reforms under reinvented state ownership. Aimed at internally strengthening the utility against political interference despite the utility's public sector status, this model delivered striking short-term gains that subsequently tailed off, while continuing to offer some resistance to political capture. Successful reforms in Gujarat, typically analyzed as quite different to West Bengal, were also more statist and

[43] Phone interview, donor agency official, August 3, 2016.

gradualist than often recognized. Given the political obstacles to power sector liberalization and examples of its dramatic failures across Asia, Latin America, and sub-Saharan Africa, such alternatives deserves serious attention by power policymakers and donor agency officials alike.

Second, West Bengal's reform trajectory was used alongside comparative evidence from other Indian states to test explanations of the political preconditions for power reform success. While the comparative weakness of rural lobbies had some effect, the article found a compelling explanation in the transition from one-party dominance to intensifying party-political competition. In contrast to influential political theories developed in the Global North, this suggests that party-political competition does not make Indian politicians more likely to deliver public services, but rather leads to short-termism and political capture of utilities. Conversely, under some conditions one-party dominance in democratic systems can encourage longer-term reforms. It may not bring about improvements in basic public services, however: electric welfare gains have often been mere side-effects of the new priority accorded to industry, as confirmed by persistently poor health and education outcomes in some of the same states that have made belated improvements. The study thus assesses the promise and limits of public sector reforms as an alternative to the increasingly unpopular global liberalization template, and provides a fresh perspective on the relationship between democratic competition and developmentalism in India—the world's largest democracy, with the world's largest unelectrified population.

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